

TWO ASIATIC ALLIES OF *RANUNCULUS PENSYLVANICUS*.

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SPECIMENS of two species in the Gray Herbarium, collected in China and Hongkong, are under the name of *Ranunculus pensylvanicus* L. One of these plants from Hongkong and Shanghai is erect and more or less like the American species, except in its fruit character. The other plant, one sheet of which is from Fokien and another from Hupeh, has its fruit similar to the American plant, although with strongly hooked style, but has a repent habit. Both of these species have been considered identical with the American plant. Since they differ, however, from the American species in such important characters, it seems desirable to describe them under new names.

RANUNCULUS brachyrhynchus, n. sp., caule erecto elato pilis late patentibus hirsuto; foliis inferioribus longe petiolatis, superioribus subsessilibus; foliolis petiolulatis inaequaliter 3-lobatis argute serratis; floribus parvis; sepalis reflexis subtus hirsutis supra glabris; achaeniis in capite globoso vel paullo lateque ovoideo symmetricis tam in margine dorsali quam ventrali aequaliter curvatis; stylo brevi recto basi lato ad apicem achaenii centroso, faciebus achaeniorum planis prominenter marginatis; receptaculo piloso.

Stem erect, tall, hirsute with widely spreading hairs; lower leaves long-petioled; upper subsessile, ternatifid; leaflets stalked, unequally 3-lobed, sharply serrate, acute: flowers small: sepals reflexed, hirsute on the lower side, glabrous on the upper; achenes in a globose or slightly broad-ovoid head, symmetrically curved on both the dorsal and ventral margins; style short, broad-based, straight, centrally placed; faces of the achene prominently margined; receptacle pilose.—HONGKONG: April 17, 1893, *Hongkong Herbarium*, no. 10,200 (type in Gray Herb.). CHINA: Shanghai, comm. *Wykeham Perry*, 1883.

This plant is distinguished from *R. pensylvanicus* L. by the symmetrical outline of the achene, the dorsal and ventral margins being about equal, by the prominent intramarginal ridge and the centrally placed beak. The American plant has its fruit with round dorsal edge and almost straight ventral edge, and it is obscurely margined. The head of achenes of the Chinese plant is essentially globose, while that of the American plant is elongated.

RANUNCULUS arcuans, n. sp., caule 10–17 cm. longo repente pilis late patentibus hirsuto; foliis radicalibus longius petiolatis quam caulinis, omnibus ternatifidis dense hirsutis in facie inferiore supra sparse pilosis; foliolis 3-lobatis; lobis grosse dentatis; floribus parvis; sepalis reflexis subtus hirsutis supra glabris; achaeniis in capite globose prominenter marginatis margine dorsali rotundatis, margine ventrali vel minus rotundatis vel rectiusculis, faciebus planis, rostro in apicem arcuatam attenuato.

Stem 10–17 cm. long, repent, hirsute with bristling widely spreading hairs: radical leaves longer-petioled than the stem-leaves, all ternatifid, densely hirsute on the lower side, sparingly pilose on the upper; leaflets 3-lobed, lobes coarsely toothed: flowers small: sepals reflexed, hirsute on the lower side, glabrous above: achenes in a globose head, prominently margined, dorsal margin rounded, ventral much less so or nearly straight; faces flat; beak attenuate into a hooked tip.—CHINA: Province of Hupeh, 1885–88, *A. Henry*, no. 4039 (type in Gray Herb.); Province of Fukien, 1904, *Hongkong Herbarium*, no. 2317.

This plant has a low and repent habit as contrasted with *R. pensylvanicus* L., which is high and erect. The achenes of these two species are more or less alike but the style in the Chinese plant is longer than in the American and conspicuously hooked. The achenes of the Chinese plant are also prominently margined and the shape of the head of achenes is globose.

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GALIUM PILOSUM AND ITS VARIETIES.

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EVER since 1841 the traditional treatment of *Galium pilosum* has been that adopted in Torrey and Gray's Flora of North America, distinguishing a typical, wide-spread variety with pubescent stem and commonly oval leaves, and a southern one nearly or quite glabrous and with narrower, more oblong leaves. The recent collection by one of us, on Cape Cod, of two apparently different forms has led to a study of the forms of the species which shows that at least one more variety can profitably be recognized, and also leads to what we may